

OPERATOR'S MANUAL FOR
MORSE 285HD SERIES HEAVY-DUTY FORK LIFT-KARRIER
Serial Number 0793 to _____ (MMYY)

MODELS: **285A-HD** – for 55 gallon standard steel drums (22½” diameter)
 285A/E-HD – for 55 gallon standard steel drums and *fibre drums
 285G-HD – for 55 gallon standard steel drums / features three-piece saddle

A. IMPORTANT:

1. Review the Material Safety Data Sheet(s) for the material(s) in the drum(s) and take all necessary precautions. Safety shoes, work gloves, hard hat and other personal protective devices are recommended.
2. Please read all instructions *thoroughly* before attempting to operate your new MORSE drum handler.
3. The models 285A-HD, 285A/E-HD, and 285G-HD have a maximum capacity rating of 1500 lb. full drum and 800 lb. half-full drum and are designed to lift, move and pour *55 gallon steel drums*. (The model 285A/E-HD can handle a fibre drum if the appropriate saddle adaptor, 55/30 series, is installed.) *DO NOT* exceed these ratings. Exceeding these ratings or handling drums other than those mentioned above is unsafe and could result in equipment damage, excessive wear or awkward handling.
4. When loading, unloading, operating, or maintaining your MORSE drum handler, always use care and good judgment. Maintain secure footing and a firm hold. Keep hands and loose clothing away from all moving parts. Never allow anyone to be below any part of a raised drum handler or drum. Read operating instructions and review the pictures in the sales brochure before operation.
5. Because the 285-HD series are front-end attachments for a forklift, OSHA recommends that “... *the truck (forklift) be marked to identify the attachment(s) and show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered.*”

Prior to initial use, inspect all moving parts and test rotation of chain wheel and saddle assembly. Inspect ratchet, pawl and cinch chain for proper operation. Perform necessary load test, inspections, operator training, etc.

B. OPERATING INSTRUCTIONS:

1. Before sliding forklift forks into the fork tubes, adjust forks to an inside spread of 24-1/2” minimum. Lock forks into position on the forklift carriage.
2. Drive the forklift forward to slip the forks into the fork tubes (see item #25). Tighten tee screws (item #26) to secure the Forklift Karrier to the forks.
3. Release the cinch chain (item #29), or E14 strap (item #50), and hang the loose end from the upright peg on the front of the gear block. Swing the ratchet hinge plate to the open position. (On the model 285G-HD, pull the linchpin (item #46), open the toggle clamp, and swing both hinge bands to the open position.)
4. Drive the forklift with the Forklift Karrier near floor level to position the saddle band around the middle of the drum between the ribs.
5. Drape the cinch chain across the front of the drum and insert one link into the slot on the ratchet handle (item #37). Turn the ratchet handle clockwise to tighten the cinch chain around the drum (see detail). (On the model 285G-HD, close the two hinged bands around the drum, latch the toggle clamp, and insert the linchpin.)
6. Remove pull chain (item #3) from chain box on base frame (item #25) and place end of loop near operator’s seat.
7. Raise forks to clear the floor and transport drum in **vertical** position to dispensing location.
8. To pour drum: pull on chain (item #3), rotating drum to angle required for dispensing. To control the pouring angle of the drum, pay out one side of chain and pull the other side to prevent the drum from free-wheeling.
9. When dispensing is completed, rotate the drum back to vertical and return drum. While transporting, ensure that the drum is raised away from the floor to prevent the drum bottom from interfering with a pallet or other obstacle.

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CAUTION: DO NOT allow drum to impact on floor, ground, or dumping station, etc.

CAUTION: DO NOT exceed weight capacity of 1500 lb. for FULL drum, 800 lb. for HALF-FULL drum.

C. MAINTENANCE:

1. Lubricate gear teeth and roller chain.
2. Clean and oil ratchet, pawl, saddle hinge, and other moving parts periodically. (Clean & lubricate more often in environments where dust, dirt or other foreign particles will effect the performance of moving parts.)
3. Periodically inspect all moving parts, framework, and contact areas for signs of wear, fatigue, or loosening. Tighten adjust or replace parts as necessary to prevent failure and maintain proper function.

** For each size fiber drum, the model 285A/E-HD requires a 55/30 series saddle adaptor.*

ITEM NUMBER	* MODEL	QTY.	PART NUMBER	DESCRIPTION
1		1	1303-P	POCKET CHAIN WHEEL, 3/4 BORE
2		1	1304-P	GUIDE, POCKET CHAIN WHEEL
3		1	3-285-P	PULL CHAIN, POCKET, 20' LENGTH
4		1	19-P	BEARING, 3/4" ID X 2-1/2"
5		3	55-P	WASHER, 3/4 SAE FL 1-1/2 OD
6		2	64-P	ROLL PIN, 3/16 X 1-1/4
7		1	1302-P	SHAFT W/ 12T SPROCKET, POCKET
8		1	12-P	CHAIN, ROLLER, #35 W/ M LINK
9		1	795-P	LINK, MASTER, #35 CHAIN
10		1	13-P	SPROCKET #35 36T, 3/4" BORE
11		1	735-P	KEY, WOODRUFF, SIZE 9, ASA606
12		1	14-P	GEAR, PINION, 7 TOOTH
13		1	27-P	SPUR GEAR W/ 1" SHAFT, HD TYPE
14		2	736-P	KEY, WOODRUFF, SIZE 15, ASA808
15		1	29-P	SPACER, SPUR GEAR .15"
16		1	15-P	COLLAR, 3/4" ID
17		1	30-P	SPROCKET #40D 16T, 1" BORE
18		1	31-P	CHAIN, ROLLER, #40D W/ M. LINK
19		1	796-P	LINK, MASTER, FOR #40D CHAIN
20		1	32-P	SPROCKET #40D 32T, 1" BORE
21		1	7-P	BEARING, 3/4" ID X 1-1/2"
22		2	18-P	BEARING, 1" ID X 2-1/2"

* UNLESS OTHERWISE SPECIFIED, PARTS ARE FOR MODELS 285A-HD, 285A/E-HD, & 285G-HD.

ITEM NUMBER	* MODEL	QTY.	PART NUMBER	DESCRIPTION
23 (see note 2)	A	1	745A-P	SADDLE ASM CPT, A-HD, '88
23 (see note 2)	A/E	1	745AE-P	SADDLE ASM CPT, 285A-HD W/ E14
24				SADDLE WELD (NOT SOLD SEPARATELY)
25		1	770A-P	BASE FRAME 285A W/BRG
26		2	58-P	LOCK TEE SET SCREW, 285
27		1	82-P	3/8 - 16 X 2-1/4 HHCS GR 2 STL
28	A, A/E	1	1169-P	3/8 - 16 REV HEX LOC NUT
29	A	1	180-P	CHAIN, CINCH, 3/16 ALLOY 33 LK
30	A, A/E	1	731-P	RATCHET HINGE PLATE ONLY 1/4 A
31	A, A/E	1	1296-P	1/4 - 20 X 7-1/2 HHCS GR 5 STL
31	G	2	1296-P	1/4 - 20 X 7-1/2 HHCS GR 5 STL
32	A, A/E	1	1297-P	1/4 - 20 REV HEX LOC NUT
32	G	2	1297-P	1/4 - 20 REV HEX LOC NUT
33	A, A/E	1	168-P	PAWL, WITH DRILLED HOLE
34	A, A/E	1	169-P	PAWL SPRING
35	A, A/E	1	170-P	3/8" DIA X 5/8" SHOULDER SCREW
36	A, A/E	1	710-P	RETAINER, RATCHET PUSH ON 3/4"
37	A, A/E	1	165-P	RATCHET, MALLEABLE, FOR SADDLE
38	A, A/E	1	136-P	HANDLE GRIP, 7/8" X 4-3/4"
39	A, A/E	1	165KIT-P	KIT, RATCHET CHAIN TIGHTENER
40	A	1	726-P	RATCHET HINGE PLATE CPT 1/4" A
41	G	1	2671-P	HINGE CPT, IDLER, 3PC
42	G	1	2672-P	HINGE CPT, DRIVE, 3PC
43	G	1	2870-P	THREADED ROD, PCR-2000
44	G	1	2674-P	THREADED BARREL, CAMLOCK
45	G	2	2872-P	3/8 - 24 FIN HEX NUT, PCR-2000
46	G	1	2871-P	LINCH PIN, 3PC SADDLE
47	G	1	2680-P	KEEPER CHAIN, LINCH PIN, 6"
48				SADDLE WELD, 3PC (NOT SOLD SEPARATELY)
49 (see note 3)	G	1	745G-P	SADDLE ASM CPT, 3PC, G-HD
50	A/E	1	E14	FIBRE DRUM STRAP 14"

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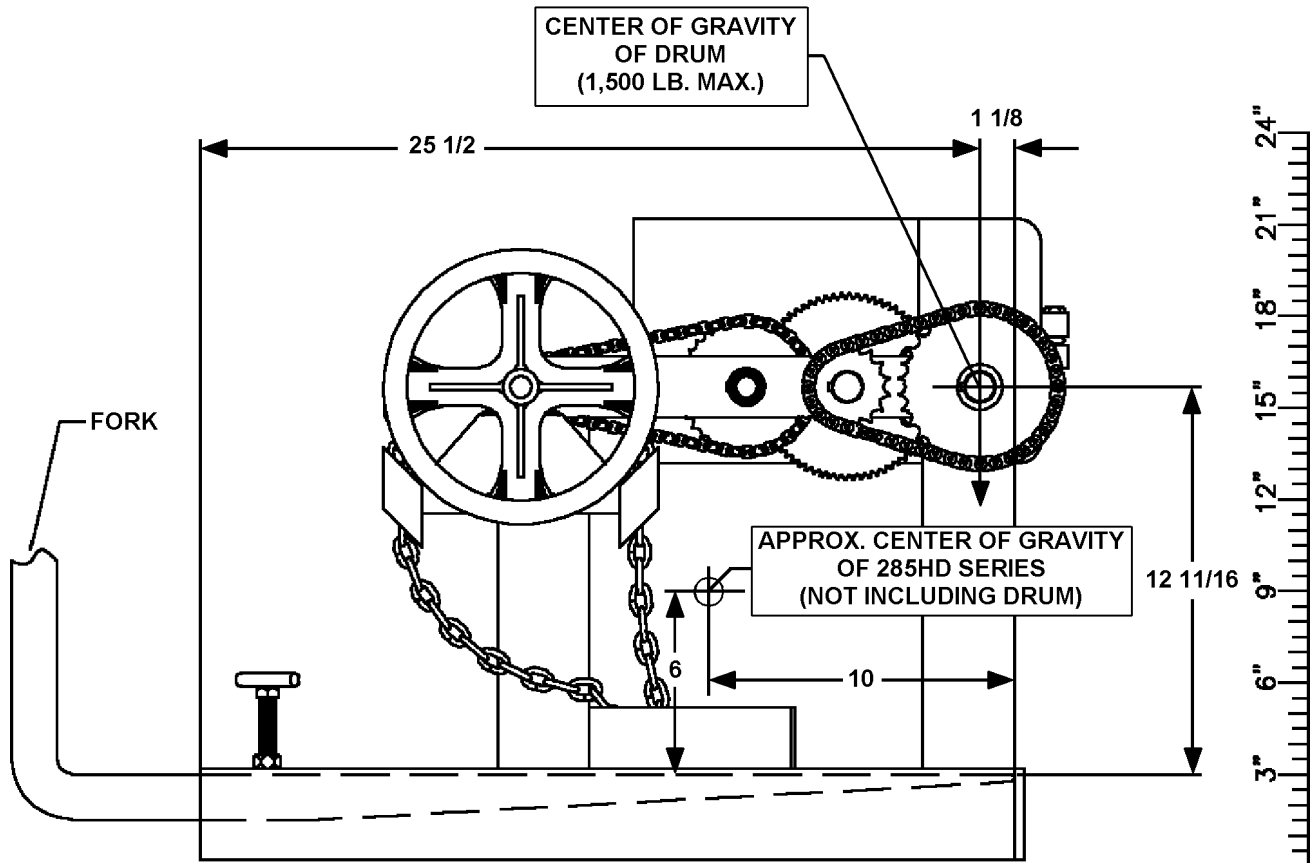
NOTE#2: "Saddle Assembly Complete" (#23) includes the "Saddle Weldment" (#24) and appropriate attached moving parts, such as 27, 28, 29 or 50, 31, 32, and 40. "Saddle Weldment" (#24) has no moving parts.

NOTE#3: "Saddle Assembly Complete" (#49) includes the "Saddle Weldment" (#48) and appropriate attached moving parts, such as 31, 32, 41, and 42. "Saddle Weldment" (#48) has no moving parts.

LOST LOAD CAPACITY WITH MORSE 285HD SERIES HEAVY-DUTY FORK LIFT-KARRIER

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CENTER OF GRAVITY DIMENSIONS FOR CALCULATING LOST LOAD ON EQUIPMENT



DIMENSIONS ARE MEASURED FROM INSIDE OF FORK TUBE END. THIS WILL GIVE A FIXED POINT TO WHICH LOST LOAD DATA CAN BE DETERMINED. (FORKS MUST BE TOUCHING THIS FORK TUBE END.)

MODEL	NET WEIGHT
285A-HD	150 LB.
285AM-HD	150 LB.
285A/E-HD	152 LB.
285G-HD	160 LB.

OPTION	ADD TO MODEL
X01	4 LB.
X02	0 LB.
X03	4 LB.
X04	10 LB.



MORSE 285HD SERIES HEAVY-DUTY FORK LIFT-KARRIER

**WARRANTY FOR MORSE 285HD SERIES HEAVY-DUTY FORK LIFT-KARRIER
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MORSE DRUM HANDLING EQUIPMENT IS GUARANTEED AGAINST DEFECTS in workmanship or materials for 2 years when used properly within its rated capacity. Motors and other purchased parts carry the warranties of their manufacturers.

For warranty claims, contact Morse to obtain a return authorization number. Return freight must be prepaid.

In all instances, liability is limited to the purchase price paid or to repairing or replacing the product. Customer assumes liability for any modifications, unauthorized repairs or parts substitution.